

**From:** [McInnis, Amanda](#)  
**To:** [Tina Laidlaw/MO/R8/USEPA/US@EPA](#)  
**Subject:** RE: Missoula  
**Date:** 09/29/2011 08:54 AM

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My very back of the envelope calculation would be:

River--574 cfs (0.16 mg/L TN)+ WWTP--18 cfs (7 mg/L TN)= Mixed River and WWTP--0.39 mg/L TN (593 cfs)

So this would say the river is still over the criteria in a simple mixing zone calculation--its 0.39, but still over and the City would have to treat to 5 mg/L TN to meet a 0.33 mg/L instream standard that was calculated in this way. This assumes a 7Q10 for the River and Mike has been saying he'd likely go with a 14Q10 which would help, but I'm not sure how much...

-----Original Message-----

From: Laidlaw.Tina@epamail.epa.gov [mailto:Laidlaw.Tina@epamail.epa.gov]  
Sent: Wednesday, September 28, 2011 10:48 AM  
To: McInnis, Amanda  
Subject: Missoula

so... does it make sense to you how Missoula can achieve the criteria if the upstream concentration is ~0.16 mg/l TN (about 1/2 the criteria). With that incoming concentration plus dilution and a mixing zone == achieving criteria with BNR? make sense to you?

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